

In addition to the above, an amount of Rs. 128-2-0 was spent in the divisions for repairing old boundary-marks.

(iv).—SURVEYS.

17. The following statement, received from the Forest Survey, gives the work and its cost during the forest year of 1896-97 with cost:—

Division.	BOUNDARY SURVEYS.		Total Cost.	REMARKS.
	Previous.	Of the year.		
	Sq. m.	Sq. m.	Rs. a. p.	
<i>Surat.</i>				
Triangulation 8" ... ..	...	141	} 979 13 11	{ Mándvi Taluka.
Traversing ... ..	...	10		
<i>North Tháná.</i>				
Detail Survey 8" ... ..	...	51·71	9,635 6 8	Máhim Taluka.
Total cost ... ..	...	...	10,615 4 7	

## CHAPTER II.

### MANAGEMENT OF STATE FORESTS.

#### I.—REGULATION AND MANAGEMENT.

##### (a).—WORKING PLANS AND THEIR CONTROL.

18. The Working Plans Division was in charge of the following officers during the year:—

1st July 1896 to 12th November 1896	...	Mr. J. Dodgson.
13th November 1896 to 21st December 1896	...	Mr. T. R. D. Bell.
22nd December 1896 to 25th January 1897	...	Mr. R. C. Wroughton.
26th January 1897 to 30th June 1897	...	Mr. G. P. Millett.

Mr. Millett, the permanent Working Plans Officer, was on furlough from 1st July 1896, but he returned within the period of his leave and resumed charge of the division from the 25th January 1897.

19. During the year the Working Plans for the forests of the Godhra Mahál in the Panch Maháls Division and Máhim, Bassein and Vádá of the Tháná District were sanctioned by Government. The proposals for the Working Plan of the Kálol Mahál are before Government. The Working Plan of the Tulsi forests belonging to the Municipality of Bombay was prepared and submitted during the year and is also before Government.

20. The forests of the Hálol Mahál, Panch Maháls Division, were examined during the year with a view to the drawing up of a Working Plan for their management, but it was not completed before the close of the year.

21. A Working Plan also for the forests of the Sálsette and Kalyán Ranges of the Tháná District was under preparation, but was not completed.

22. In addition to this work the Working Plan Officer during the year supervised the working on the ground of the coupes in the Dáhánu, Máhim and Bassein Ranges. He also supervised the reserve marking in some of the Godhrá coupes in order that the Extra Assistant Mr. Ránade might obtain some idea of the work which he had to carry out throughout the Range under the Working Plan. Finally he supervised the marking on the ground by the Working Plan surveyors both of coupes of the year and in advance in the Tháná Divisions.

23. During the year 261 coupes containing 14,007 acres were marked out on the ground in the Tháná Divisions by 739 cairns and 23,362 subsidiary stones at a cost of Rs. 1,436, equivalent to Rs. 5-8-0 per coupe, or Re. 0-1-7 per acre.

24. In the Kálol Mahál of the Panch Maháls District, 60 compartments comprised in two blocks containing 9,407 acres were marked out on the ground by 137 cairns, 253 intermediate stones, mounds and 784 subsidiary stones at a cost of Rs. 364, equivalent to Rs. 6-1-0 per compartment, or 7 pies per acre.

25. In addition to this 677 coupes in advance were marked out in the Bhiwndy and Bassein Ranges by 2,369 cairns and 15,728 subsidiary stones at a cost of Rs. 1,749-14-9. And further 246 coupes were similarly marked out in the Máhim Range by the Forest Survey at a cost of Rs. 198-8-9.

*Area brought under the control of sanctioned Working Plans up to 30th June 1897 in the Northern Circle.*

Division.	Forest area in square miles.			Area for which Working Plans prepared and sanctioned up to 30th June 1897.	Proportion of Forest area under sanctioned Working Plans.	REMARKS.
	Reserved.	Protected.	Total.			
1	2	3	4	5	6	7
					Per cent.	
North Tháná ...	278	435	713	121	17	The whole forest area of these three Tháná Divisions is being exploited under a regular system of working, but sanctioned Working Plans have only been introduced for the areas shown in column 5.
Central Tháná ...	265	115	380	204	54	
South Tháná ...	210	211	421	62	15	
Tulsi belonging to the Bombay Municipality.	3	...	3	...	...	
Surat ...	70	...	70	...	...	
Dángs leased forests.	678	...	678	...	...	
Panch Maháls ...	331	...	331	139	42	
Ahmedabad (Modása).	34	...	34	...	...	
Total ...	1,869	761	2,630	526	20	

*Progress made in Working Plans in the Northern Circle, Bombay Presidency, during the year 1896-97.*

Division.	Preliminary proposals submitted for Working Plans.		Plans submitted for opinion and remarks of the Conservator of Forests, Northern Circle.		Plans finally sanctioned by Local Government on recommendation of the Conservator of Forests, Northern Circle.		REMARKS.
	No.	Area for which prepared.	No.	Area for which prepared.	No.	Area for which prepared.	
				Square miles.		Square miles.	
North Tháná ...	...	...	...	...	1	121	
Central Tháná ...	...	...	...	...	2	204	
South Tháná ...	...	...	...	...	1	62	
Tulsi, belonging to the Bombay Municipality.	...	...	1	3	...	...	
Surat ...	...	...	...	...	...	...	
Dángs, leased forests ...	...	...	...	...	...	...	
Panch Maháls ...	...	...	1	34	1	139	
Ahmedabad (Modása) ...	...	...	...	...	...	...	
Total ...	...	...	2	37	5	526	

*Progress made in Working Plans in the Northern Circle during the year 1896-97.*

Division.	AREA FOR WHICH WORKING PLANS HAVE BEEN COMPLETED.		AREAS FOR WHICH WORKING PLANS ARE BEING COMPILED.		Areas for which Working-Plans have still to be compiled.	Total Forest area in Form No. 46.	REMARKS.
	At commencement of the year.	During the year.	At commencement of the year.	Taken in hand during the year.			
North Tháná ...	121	...	...	...	592	713	Not shown in Form. No. 46.
Central Tháná ...	204	...	...	...	176	380	
South Tháná ...	62	...	...	74	285	421	
Tulsi, belonging to the Bombay Municipality.	...	3	...	...	...	3	
Surat ...	...	...	...	...	70	70	
Dángs, leased forests...	...	...	...	...	678	678	
Panch Maháls ...	139	34	...	...	158	331	
Ahmedabad (Modása) .	...	...	...	...	34	34	
Total ...	526	37	...	74	1,993	2,630	

26. The number of coupes still to be marked in the blocks in the Tháná Division is 699 so far as settlement has been completed.

27. The following statement will show the number of coupes and their area marked for exploitation during the current year in the Tháná Divisions :—

Division.				No. of coupes marked for exploitation.	Area.		No. of coupes sold
					A. g.		
North Tháná ...	...	...	...	96	5,279	32	85
Central Tháná ...	...	...	...	93	5,396	30	72
South Tháná ...	...	...	...	86	4,638	20	70
Total ...				275	15,315	2	227

28. From this statement it will be seen that 275 coupes were put up for sale, out of which 227 were sold. The remaining 48 coupes being in out-of-the-way places could not find purchasers. In addition to these 227 coupes, however, 15 coupes belonging to previous years were sold.

The work of writing up the control books unfortunately has been found much more difficult than was expected.

29. The records have had to be searched for 10 or 12 years back, and in many cases much of the information required was not forthcoming, and even when found, owing to want of method in the record, it has been most difficult to deduce the required data with any accuracy.

30. In paragraph 97 of last year's report I wrote: "I am in hopes that in consequence of new arrangements next year's figures (*i.e.* of coupe yield) may be more reliable, and, moreover, that I shall be in a position to report not only the material exported but also that reserved." I regret that I must confess to failure, due largely to the heavy strain caused by the Famine grass operations. The arrangement was to divide all the material to be exported into a certain number of classes and insisting on these and only those classes being employed in describing the material in the export passes issued by the coupe dépôt officer.

A co-efficient of cubic contents was calculated for each of these classes. In this way it was hoped that a very fairly accurate estimate of the material exported would be obtained. The contractors, however, opposed a most obstinate resistance to the innovation, which is most significant of the inaccuracy of the records of past years, and with a short-handed establishment further crippled by the withdrawal of two extra Assistant Conservators besides subordinates on Famine grass operations, the arrangement could not be efficiently enforced. One good result of the attempt, however, has been that desirable revisions in the classification have been indicated, and in the current year contractors have been made to understand at the time of purchasing the coupes that the arrangement is to be carried out. As the material is their own property and the record of the quantity has no effect on the sale price which is fixed beforehand by public tender, it is difficult to understand why the contractors should object to the arrangement. That they do so however most emphatically is shown by the fact that on the first date named not a single tender was received and a second call had to be made before any sales could be effected. The reason urged is, that the depôt officers are not sufficiently educated to be entrusted with measuring the material, but this has been met by so fixing the classes that a piece of string with 3 knots in it and a 10-foot bamboo are all that will be required for the efficient classification of the material. The similar record of material reserved has also not been a success, but as the arrangements were already fairly complete, though unnecessarily cumbersome, this failure has not been so marked.

31. The improved marking of reserves alluded to in paragraph 95 last year could not be introduced generally. Instead of an increased establishment there was only one crippled, as already stated, and for the most part the old system of reserve marking had to be resorted to. The Divisional Forest Officers, North and Central Tháná, however, marked personally a few coupes, stamping each reserve with a Government timber mark; but the Divisional Forest Officer, South Tháná, who for over two months was in direct charge of the grass operations, could of course not undertake anything of the sort. The present working season has now commenced and the extra establishment asked for has not been sanctioned, so that even next year's report will not, I fear, be able to record that this useful measure has been universally introduced, but it is earnestly hoped that this will be the end of the delay in its introduction.

32. The Godhra Working Plan, which comes into operation for the first time this season, will profit by the experience thus gained and its control record should be accurate from the very commencement.

## II.—WORKING OF THE YEAR.

### (a).—COMMUNICATION AND BUILDINGS.

33. The expenditure under this head incurred departmentally was Rs. 6,348-14-3 during the year. The details of the works for which this amount was spent are given in Form No. 51.

34. The following is the list of works carried out during the year by the agency of the Public Works Department:—

No.	Name of Work.	Amount expended.
	ORIGINAL WORKS.	Rs.   a.   p.
	<i>North Tháná.</i>	
1	Putting up a window in the Wángáon Depôt House ...	15   1   2
	<i>Central Tháná.</i>	
2	Providing plank ceiling to the Record and Office-room of the Range Forest Officer's residence at Khardi ... ..	132   15   11
3	Additions and alterations to the Forest Depôt House at Kására ...	216   1   6